CLAIMS:

1. A method for processing analytes (20) in a first solution (15A), said solution furthermore containing charged particles (1, 5) and the first solution filling a compartment, comprising the method steps:

   A) subjecting said compartment to an electric field, thereby reducing the amount of the charged particles (1,5) in a part (10) of the first solution (15A), which is located in a section of the compartment,

   B) subjecting said part (10) of the first solution obtained in step A) containing the analytes (20) to further processing.

2. Method according to the previous claim,

- wherein an alternating electric field is applied in step A).

3. Method according to claim 1 or any one of the above claims,

- wherein the analytes (20) have a lower electrophoretic mobility than the particles (1,5).

4. Method according to claim 2 or any one of the above claims,

  - wherein an alternating voltage of 0,1 to 5 Hz is applied in step A).

5. Method according to claim 1 or anyone of the above claims, wherein

  - a conduit (80) having reservoirs (85) at its end points is used as a compartment containing the first solution,

  - the charged particles (1, 5) mainly being moved into the reservoirs (85) when applying the electric field in step A).

6. Method according to the previous claim,

  - wherein the reservoirs (85) of the conduit (80) are filled with a second solution (15B) containing a lower concentration of the charged particles (1, 5) than the

first solution (15A).

7. Method according to the previous claim,

- wherein the reservoirs (85) of the conduit (80) are filled with low conductivity buffer or deionized water.

8. Method according to claim 2 or anyone of the above claims,

- wherein the polarity of the alternating electric field is changed roughly two times in step A).

9. Method according to claim 1 or any one of the above claims,

- wherein the amount of at least one of the following charged particles (1, 5) is reduced in step A):

- salts, buffer molecules, nucleotides and amino acids, organic dyes.

10. Method according to claim 1 or any one of the above claims,

- wherein in step B) the analytes (20) are analyzed by at least one of the following methods:

capillary electrophoresis, capillary gel electrophoresis, chromatography, isoelectric focussing and SDS-PAGE.

11. Method according to claim 1 or any one of the above claims,

- wherein a microfluidic device having conduits is used for step A) and B).

12. Method according to the previous claim,

- wherein a microfluidic device is used,

- having a first conduit (80) for carrying out step A) and a second conduit (90) for carrying out step B),

- the second conduit (90) running diagonally to the first conduit (80) having a

junction (100) with the first conduit (80).

13. Method according to the previous claim,

- wherein in step A) the first solution (15A) is applied into the first conduit (80) and an alternating electric field is applied to said first conduit, thereby reducing the amount of the charged particles (1, 5) in the part (10) of the first solution (15A) being located around the junction (100),

- wherein in step B) the part (10) of the first solution (15A) being located around the junction (100) is introduced into the second conduit (90) by applying a force to said second conduit (90), the force being selected from: pressure driven flow, evaporation driven flow, gravitational force, centrifugal force, capillary force and electric energy.

14. Method according to claim 1 or any one of the above claims,

- wherein in step A) an electric field is applied across the endpoints of a conduit filled with the first solution, thereby reducing the amount of the charged particles substantially in the middle section of the conduit.

15. Use of a microfluidic device for a method according to claim 1 or any one of the above claims.

16. An apparatus for processing analytes contained in a first solution including charged particles, comprising:

- a first compartment adapted for receiving the first solution,

- a first source of electric energy adapted for subjecting a part of the first solution in the compartment to an alternating electric field, thereby reducing the amount of the charged particles in said part of the first solution.

17. The apparatus according to the previous claim, furthermore comprising

- a second compartment having a junction with the first compartment and

- a second source of energy being selected from a group of sources generating pressure, centrifugal force, gravitational force, electric energy and capillary force.

18. A microfluidic device according to claim 16 or 17, comprising:

  - a substrate with conduits (80, 90, 110) formed therein, the conduits having wells (85) at their end points,
  - a first conduit as the first compartment for step A) and a second conduit as a second compartment for step B), the first and second conduit having a first junction (100),
  - at least one third conduit (110A) for introduction of the first solution (15A) into the device, the third conduit (110A) having a second junction (120A) with the first conduit,
  - the distance (d) between the second junction (120A) and the nearest end point (150A) of the first conduit (80) being equal or smaller than the distance (e) between the first junction (100) and the second junction (120A).

19. The microfluidic device according to claim 18,

  - wherein an fourth conduit (110B) is part of the device, said fourth conduit (110B) having a third junction (120B) with the first conduit (80),
  - the distance (d) between the second junction (120A) and the nearest end point (150A) of the first conduit (80) and the distance (d') between the third junction (120B) and the nearest end point (150B) of the first conduit (80) are both being equal or smaller than the distance (f) between the second (120A) and the third (120B) junction.

20. The microfluidic device according to claim 18 or claim 19,

  wherein the first junction (100) comprises a double T-junction.